

**REMARKS**

After entry of this paper, claims 1-33 are pending in this application. Applicants reserve the right to pursue the subject matter of the withdrawn or cancelled subject claims in a divisional or continuing application. Claims 1-33 are pending in this application and have been subjected to election of an invention group and a single disclosed sequence for prosecution on the merits under 35 U.S.C. §121. In the Examiner's opinion, as set forth in the Detailed Action, the application contains claims directed to five patentably distinct inventions as follows:

Group I: claims 1-15, 20-21, 27, and 32, drawn to isolated nucleic acids, expression vectors, and host cells, classified in class 536, subclass 23.1, class 435, subclass 320.1, and class 435, subclass 325, respectively;

Group II: claims 16-19 and 22, drawn to amino acid sequences and polypeptides, classified in class 530, subclass 350;

Group III: claims 23-26, drawn to antibodies, classified in class 530, 387.1;

Group IV: claim 28, drawn to a method of identifying a human chromosome 12q23-qter gene classified in class 436, subclass 501; and

Group V: claims 29-31 and 33, drawn to a method of treating a chromosome 12 disorder comprising administering antibodies, classified in class 514, subclass 2.

As stated above, applicants provisionally elect **Group 1, including claims 1-15, 20-21, 27, and 32** for prosecution. Applicants respectfully disagree with the restriction requirement imposed by the Examiner and the characterizations made of the claimed invention. Accordingly, this election is made with traverse.

Furthermore, the Examiner is of the opinion that the application contains claims directed to patentably distinct sequences of the claimed invention. However, applicants provisionally elect **SEQ ID NO:4, and a SNP of SEQ ID NO:49 (located at base positions 1371-1409 of elected SEQ ID NO:4)** for prosecution with traverse.

For the reasons stated in the Office Action, it is the Examiner's position that restriction for examination purposes as indicated is proper because the inventions are distinct and have acquired a separate status in the art as shown by the identified different classifications.

According to M.P.E.P. §803, there are two criteria for a proper requirement for restriction between patentably distinct inventions:

- (1) The inventions must be independent or distinct as claimed; and
- (2) There must be serious burden on the examiner if restriction is not required.

Applicant respectfully submits that (1) all groups of restricted claims are properly presented in the same application; (2) undue diverse searching would not be required; and (3) all claims should be examined together.

The Examiner has parsed the claims of the present application into the 5 groups of inventions identified above. The Examiner has not shown that examination of all the pending claims would require undue searching and/or place a serious burden on the Examiner, which is a requisite showing for proper issuance of a restriction requirement. In fact, applicants submit that to properly search any one group, the other groups must be considered as well to perform a comprehensive search.

Applicants submit that since the nucleic acid of the Group I claims can encode the proteins claimed in the Group II claims, a search of the claimed DNA molecules and encoded proteins would necessarily overlap, since the nucleic acid sequence provides a deduced amino acid sequence for the protein. Specifically, applicants assert that restriction is improper between Group I and Group II since the nucleic acids, vectors, and host cells of claims 1-15, 20-21, 27 and 32 encode and express the product encompassed by the claims in Group II (claims 16-19 and 22). Thus, as restriction based upon search or examination burden alone would appear to be unjustified, applicants request that the claims of Groups I and II be considered as a single group. Applicants believe that this position is supported by MPEP 800-4, left hand column under MPEP §803, which recites that "If the search and examination of all the claims in an application can be made without serious burden, the Examiner must examine them on the merits, even though they include claims to distinct or independent inventions." Accordingly, reconsideration of the restriction/election requirement is respectfully requested.

Restriction is also improper between Group I, Group II, Group III, and Group V since the methods of treating of Group V use antibodies of Group III having an antigen binding portion to the polypeptides of Group II and nucleic acids of Group I encoded by such polypeptides may be bound.

Applicants respectfully request reconsideration and withdrawal or at a minimum modification of the requirement (37 C.F.R. §1.143).

### CONCLUSION

Based on the foregoing amendments and remarks, applicants respectfully request reconsideration and withdrawal of the restriction requirement of claims and allowance of this application.

### AUTHORIZATION

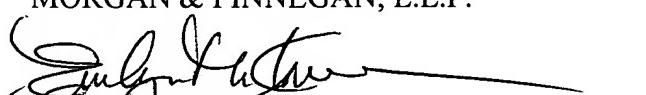
The Commissioner is hereby authorized to charge any additional fees which may be required for consideration of this Amendment to Deposit Account No. **13-4500**, Order No. 2976-4037US1. A DUPLICATE OF THIS DOCUMENT IS ATTACHED.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. **13-4500**, Order No. 2976-4037US1. A DUPLICATE OF THIS DOCUMENT IS ATTACHED.

Respectfully submitted,  
MORGAN & FINNEGAN, L.L.P.

Dated: September 21, 2006

By:



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Evelyn M. Kwon  
Registration No. 54,246

#### Correspondence Address:

MORGAN & FINNEGAN, L.L.P.  
3 World Financial Center  
New York, NY 10281-2101

(212) 415-8700      Telephone  
(212) 415-8701      Facsimile